

Serial No. 09/857,067

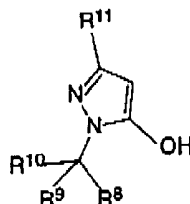
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## A P P E N D I X I:

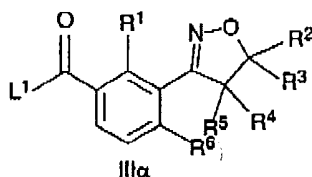
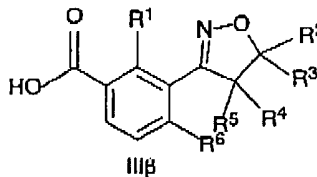
THE CHANGES IN THE CLAIMS (version with markings, showing the changes made):

5. (currently amended) A process for preparing 3-(heterocyclyl)-substituted benzoylpyrazoles of the formula I as claimed in claim 1, which comprises acylating a pyrazole of the formula II

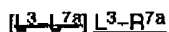


II

with an activated benzoic acid III $\alpha$  or a benzoic acid III $\beta$ ,

III $\alpha$ III $\beta$ 

where the variables X, R<sup>1</sup> to R<sup>6</sup> and R<sup>8</sup> to R<sup>11</sup> are as defined in claim 1 and L<sup>1</sup> is a nucleophilically replaceable leaving group and rearranging the acylation product, in the presence or absence of a catalyst, to give the compounds of the formula I where R<sup>7</sup>  $\neq$  hydroxyl and optionally, to prepare 3-(heterocyclyl)-substituted benzoylpyrazoles of formula I where R<sup>7</sup>  $\neq$  hydroxyl as claimed in claim 1, reacting the obtained product with a compound of formula VI



VI[4]

wherein

L<sup>3</sup> is a nucleophilically replaceable leaving group, and

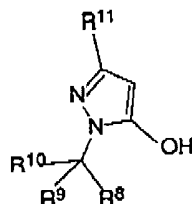
R<sup>7a</sup> is C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>2</sub>-C<sub>6</sub>-alkenyl, C<sub>1</sub>-C<sub>6</sub>-alkylsulfonyl, C<sub>1</sub>-C<sub>6</sub>-alkylcarbonyl, C<sub>1</sub>-C<sub>4</sub>-(alkylthio)carbonyloxy, phenylsulfonyl or phenylcarbonyl, where the phenyl radical of the two last-mentioned substituents may be partially or fully halogenated and/or may carry one to three of the following groups: nitro, cyano, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy or C<sub>1</sub>-C<sub>4</sub>-haloalkoxy.

6. (currently amended) A process for preparing 3-(heterocyclyl)-substituted benzoylpyrazoles of the formula I as claimed in claim 1, which comprises reacting a pyrazole of the formula II

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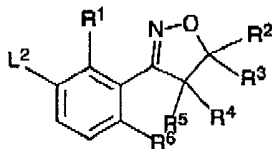
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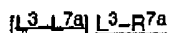
II

in which the variables R<sup>8</sup> to R<sup>11</sup> are as defined in claim 1, or an alkali metal salt thereof, with a 3-(heterocyclyl)benzene derivative of the formula V



V

where the variables X and R<sup>1</sup> to R<sup>6</sup> are as defined in claim 1 and L<sup>2</sup> is a leaving group in the presence of carbon monoxide, a catalyst and a base, to give the compounds of formula I where R<sup>7</sup> = hydroxyl and optionally, to prepare 3-(heterocyclyl)-substituted benzylpyrazoles of formula I where R<sup>7</sup> ≠ hydroxyl as claimed in claim 1, reacting the obtained product with a compound of formula VI



VI(a)

wherein

L<sup>3</sup> is a nucleophilically replaceable leaving group, and

R<sup>7a</sup> is C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>3</sub>-C<sub>6</sub>-alkenyl, C<sub>1</sub>-C<sub>6</sub>-alkylsulfonyl, C<sub>1</sub>-C<sub>6</sub>-alkylcarbonyl, C<sub>1</sub>-C<sub>4</sub>-(alkylthio)carbonyloxy, phenylsulfonyl or phenylcarbonyl, where the phenyl radical of the two last-mentioned substituents may be partially or fully halogenated and/or may carry one to three of the following groups: nitro, cyano, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy or C<sub>1</sub>-C<sub>4</sub>-haloalkoxy.

15. (currently amended) A 3-(heterocyclyl)-substituted benzoylpyrazole of formula I as defined in claim 1 wherein

R<sup>7</sup> is hydroxyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>3</sub>-C<sub>6</sub>-alkenyloxy, [~~C<sub>1</sub>-C<sub>6</sub>-alkylsulfonyloxy~~] C<sub>1</sub>-C<sub>6</sub>-alkylsulfonyloxy, C<sub>1</sub>-C<sub>6</sub>-alkylcarbonyloxy, C<sub>1</sub>-C<sub>6</sub>-alkylthiocarbonyloxy or phenylcarbonyloxy, where the phenyl radical of the last-mentioned substituent may be partially or fully halogenated and/or may carry one to three of the following groups: nitro, cyano, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy or C<sub>1</sub>-C<sub>4</sub>-haloalkoxy.

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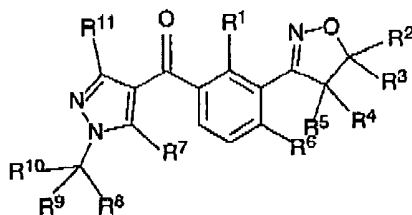
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## A P P E N D I X II:

THE AMENDED CLAIMS (clean version of all claims):

1. (original) A 3-(heterocyclyl)-substituted benzoylpyrazole of the formula I



where:

X is O, NH or N(C<sub>1</sub>-C<sub>6</sub>-alkyl);

R<sup>1</sup> is C<sub>1</sub>-C<sub>6</sub>-alkyl;

R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup> are hydrogen, C<sub>1</sub>-C<sub>4</sub>-alkyl or C<sub>1</sub>-C<sub>4</sub>-haloalkyl;

R<sup>6</sup> is halogen, nitro, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, C<sub>1</sub>-C<sub>4</sub>-haloalkoxy, C<sub>1</sub>-C<sub>4</sub>-alkylthio, C<sub>1</sub>-C<sub>4</sub>-haloalkylthio, C<sub>1</sub>-C<sub>4</sub>-alkylsulfonyl or C<sub>1</sub>-C<sub>4</sub>-haloalkylsulfonyl;

R<sup>7</sup> is hydroxyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>3</sub>-C<sub>6</sub>-alkenyloxy, C<sub>1</sub>-C<sub>6</sub>-alkylsulfonyloxy, C<sub>1</sub>-C<sub>6</sub>-alkylcarbonyloxy, C<sub>1</sub>-C<sub>4</sub>-(alkylthio)carbonyloxy, phenylsulfonyloxy or phenylcarbonyloxy, where the phenyl radical of the two last-mentioned substituents may be partially or fully halogenated and/or may carry one to three of the following groups:

nitro, cyano, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy or C<sub>1</sub>-C<sub>4</sub>-haloalkoxy;

R<sup>8</sup>, R<sup>9</sup> are C<sub>1</sub>-C<sub>4</sub>-alkyl;

R<sup>10</sup> is hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl;

where the number of the carbon atoms of the radicals R<sup>8</sup>, R<sup>9</sup> and R<sup>10</sup> together is at most 7,

R<sup>11</sup> is hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl;

and its agriculturally useful salts.

2. (original) A 3-(heterocyclyl)-substituted benzoylpyrazole of the formula I as claimed in claim 1 where

X is O;

R<sup>1</sup> is C<sub>1</sub>-C<sub>4</sub>-alkyl;

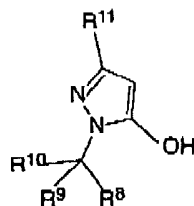
R<sup>6</sup> is C<sub>1</sub>-C<sub>4</sub>-alkylthio or C<sub>1</sub>-C<sub>4</sub>-alkylsulfonyl.

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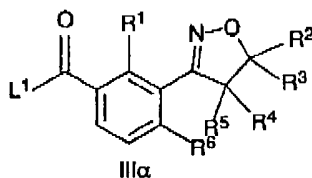
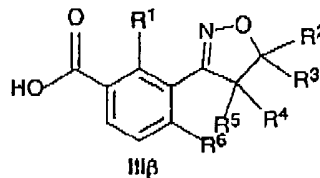
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3. (original) A 3-(heterocyclyl)-substituted benzoylpyrazole of the formula I as claimed in claim 1 where
- X is O;
- R<sup>1</sup> is C<sub>1</sub>-C<sub>4</sub>-alkyl;
- R<sup>6</sup> is halogen, nitro, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy or C<sub>1</sub>-C<sub>4</sub>-haloalkoxy.
4. (original) A 3-(heterocyclyl)-substituted benzoylpyrazole of the formula I as claimed in claim 1 where X is N(C<sub>1</sub>-C<sub>6</sub>-alkyl).
5. (currently amended) A process for preparing 3-(heterocyclyl)-substituted benzoylpyrazoles of the formula I as claimed in claim 1, which comprises acylating a pyrazole of the formula II



II

with an activated benzoic acid III $\alpha$  or a benzoic acid III $\beta$ ,

III $\alpha$ III $\beta$ 

where the variables X, R<sup>1</sup> to R<sup>6</sup> and R<sup>8</sup> to R<sup>11</sup> are as defined in claim 1 and L<sup>1</sup> is a nucleophilically replaceable leaving group and rearranging the acylation product, in the presence or absence of a catalyst, to give the compounds of the formula I where R<sup>7</sup> = hydroxyl and optionally, to prepare 3-(heterocyclyl)-substituted benzoylpyrazoles of formula I where R<sup>7</sup>  $\neq$  hydroxyl as claimed in claim 1, reacting the obtained product with a compound of formula VI

L<sup>3</sup>-R<sup>7a</sup>

VI

wherein

L<sup>3</sup> is a nucleophilically replaceable leaving group, and

R<sup>7a</sup> is C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>3</sub>-C<sub>6</sub>-alkenyl, C<sub>1</sub>-C<sub>6</sub>-alkylsulfonyl, C<sub>1</sub>-C<sub>6</sub>-alkylcarbonyl, C<sub>1</sub>-C<sub>4</sub>-(alkylthio)carbonyloxy, phenylsulfonyl or phenylcarbonyl, where the phenyl radical of the two last-men-

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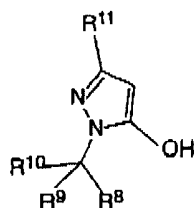
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tioned substituents may be partially or fully halogenated and/or may carry one to three of the following groups:

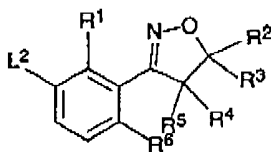
nitro, cyano, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy or C<sub>1</sub>-C<sub>4</sub>-haloalkoxy.

6. (currently amended) A process for preparing 3-(heterocyclyl)-substituted benzoylpyrazoles of the formula I as claimed in claim 1, which comprises reacting a pyrazole of the formula II



II

in which the variables R<sup>8</sup> to R<sup>11</sup> are as defined in claim 1, or an alkali metal salt thereof, with a 3-(heterocyclyl)benzene derivative of the formula V



V

where the variables X and R<sup>1</sup> to R<sup>6</sup> are as defined in claim 1 and L<sup>2</sup> is a leaving group in the presence of carbon monoxide, a catalyst and a base, to give the compounds of formula I where R<sup>7</sup> = hydroxyl and optionally, to prepare 3-(heterocyclyl)-substituted benzylpyrazoles of formula I where R<sup>7</sup> ≠ hydroxyl as claimed in claim 1, reacting the obtained product with a compound of formula VI

L<sup>3</sup>-R<sup>7a</sup>

VI

wherein

L<sup>3</sup> is a nucleophilically replaceable leaving group, and

R<sup>7a</sup> is C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>3</sub>-C<sub>6</sub>-alkenyl, C<sub>1</sub>-C<sub>6</sub>-alkylsulfonyl, C<sub>1</sub>-C<sub>6</sub>-alkylcarbonyl, C<sub>1</sub>-C<sub>4</sub>-(alkylthio)carbonyloxy, phenylsulfonyl or phenylcarbonyl, where the phenyl radical of the two last-mentioned substituents may be partially or fully halogenated and/or may carry one to three of the following groups:  
nitro, cyano, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy or C<sub>1</sub>-C<sub>4</sub>-haloalkoxy.

10. (previously amended) A composition, comprising a herbicidally effective amount of at least one 3-(heterocyclyl)-substituted ben-

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zoylpyrazole of the formula I or an agriculturally useful salt of I as claimed in claim 1 and auxiliaries which are customarily used for formulating crop protection agents.

12. (previously amended) A method for controlling undesirable vegetation, characterized in that a herbicidally effective amount of at least one 3-(heterocyclyl)-substituted benzoylpyrazole of the formula I or an agriculturally useful salt of I as claimed in claim 1 is allowed to act on the plants, their habitat and/or on seed.
14. (previously added) A process for preparing compositions as claimed in claim 10, which comprises mixing a herbicidally effective amount of at least one 3-(heterocyclyl)-substituted benzopyrazole or an agriculturally useful salt of the formula I is applied to plants, seeds and/or their habitat.
15. (currently amended) A 3-(heterocyclyl)-substituted benzoylpyrazole of formula I as defined in claim 1 wherein
- R<sup>7</sup> is hydroxyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>3</sub>-C<sub>6</sub>-alkenyloxy, C<sub>1</sub>-C<sub>6</sub>-alkylsulfonyloxy, C<sub>1</sub>-C<sub>6</sub>-alkylcarbonyloxy, C<sub>1</sub>-C<sub>6</sub>-alkylthiocarbonyloxy or phenylcarbonyloxy, where the phenyl radical of the last-mentioned substituent may be partially or fully halogenated and/or may carry one to three of the following groups:
- nitro, cyano, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy or C<sub>1</sub>-C<sub>4</sub>-haloalkoxy.
16. (previously added) A 3-(heterocyclyl)-substituted benzoylpyrazole of formula I as defined in claim 15 wherein
- X is O;
- R<sup>1</sup> is C<sub>1</sub>-C<sub>4</sub>-alkyl;
- R<sup>6</sup> is C<sub>1</sub>-C<sub>4</sub>-alkylthio or C<sub>1</sub>-C<sub>4</sub>-alkylsulfonyl.
17. (previously added) A 3-(heterocyclyl)-substituted benzoylpyrazole of formula I as defined in claim 15 wherein
- X is O;
- R<sup>1</sup> is C<sub>1</sub>-C<sub>4</sub>-alkyl;
- R<sup>6</sup> is halogen, nitro, C<sub>1</sub>-C<sub>4</sub>-haloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy or C<sub>1</sub>-C<sub>4</sub>-haloalkoxy.
18. (previously added) A 3-(heterocyclyl)-substituted benzoylpyrazole of formula I as defined in claim 15 wherein X is N(C<sub>1</sub>-C<sub>6</sub>-alkyl).